BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

KODIGEHALLI SUB DIVISOIN

Name of the Work: Reasphalting to main and cross roads at 'B','C' and 'D' Blocks of Sahakaranagara in Ward.No.08 Kodigehalli

Estimated Cost : 50.00 Lakhs

Job Code : **P-3111, SFC GRANTS 2017-18**

Job No : **008-17-000032**

BRUHAT BANGALORE MAHANAGARA PALIKE

Name Of Work: Reasphalting to main and cross roads at B,Cand D Blocks of Sahakaranagara in ward no 8

Est Cost: =50.0 Lakhs

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	sahakar nagar D block	Cum							
	shantivana 1st cross		2	321.00	0.60	0.60	231.12		
	CQAL layout 7th main		2	400.00	0.60	0.60	288.00		
	21st cross B block		2	180.00	0.60	0.60	129.60		
	11th main road B block		2	116.00	0.60	0.60	83.52		
	10th main B block		2	115.00	0.60	0.60	82.80		
	8th main 16th D cross road		2	95.00	0.60	0.60	68.40		
							883.44	186.92	**165132.60**
	Basic rate	**82.00**							
	Loading and unloading with 10km lead= 68+2.2x1.28x10 = 100	**100.00**							
	Area Weightage 6%	**4.92**							
	Final Rate	**186.92**							
2	Removing & Refixing Stone slabs of drains and Pointing in C.M(1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)								
	BS Slab Drain	Sqm							
	sahakar nagar D block								
	drain								
	shantivana 1st cross		2	321.00	1.80	--	1155.60		
	CQAL layout 7th main		2	400.00	1.80	--	1440.00		
	21st cross B block		2	180.00	1.80	--	648.00		
	11th main road B block		2	116.00	1.80	--	417.60		
	10th main B block		2	115.00	1.80	--	414.00		
	8th main 16th D cross road		2	95.00	1.80	--	342.00		
	consider 50% for R&R						2208.60		
	Consider 30% Missing slabs and damaged slabs						-662.58		
	cover								
	CQAL layout 7th main		2	400.00	1.20	--	960.00		
	21st cross B block		2	180.00	1.20	--	432.00		
	11th main road B block		2	116.00	1.20	--	278.40		
	10th main B block		2	115.00	1.20	--	276.00		
	8th main 16th D cross road		2	95.00	1.20	--	228.00		
	consider 40% avialable Cover						869.76		
	30% missing cover						-260.93		
							2154.85	80.56	**173594.88**
	Basic rate	**76.00**							
	Area Weightage 6%	**4.56**							
	Final Rate	**80.56**							

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
		Sqm							
	Consider 30% Missing slabs and damaged slabs						662.58		
							662.58	665.68	**441066.25**
	Basic rate	**628.00**							
	Area Weightage 6%	**37.68**							
	Final Rate	**665.68**							
4	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 10cms thick (P.No.25, I.No.5.31.2 of PW, P&IWTD SR 2016-17)								
		Sqm							
	30% missing cover						260.93		
							260.93	825.74	**215458.69**
	Basic rate	**779.00**							
	Area Weightage 6%	**46.74**							
	Final Rate	**825.74**							
5	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
	Road Portion	Cum							
	shantivana 1st cross		13	1.80	1.50	0.25	8.78		
	CQAL layout 7th main		20	2.80	2.00	0.25	28.00		
	21st cross B block		10	1.35	0.90	0.25	3.04		
	11th main road B block		12	0.95	1.30	0.25	3.71		
	10th main B block		13	0.80	1.60	0.25	4.16		
	8th main 16th D cross road		9	1.10	1.60	0.25	3.96		
							51.64	154.76	**7991.42**
	Basic rate	**46.00**							
	Loading and unloading with 10km lead= 68+2.2x1.28x10 = 100	**100**							
	Area Weightage 6%	**8.76**							
	Final Rate	**154.76**							
6	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158,								
	Road Portion	Cum							
	shantivana 1st cross		13	1.80	1.50	0.23	8.07		
	CQAL layout 7th main		20	2.80	2.00	0.23	25.76		
	21st cross B block		10	1.35	0.90	0.23	2.79		
	11th main road B block		12	0.95	1.30	0.23	3.41		
	10th main B block		13	0.80	1.60	0.23	3.83		
	8th main 16th D cross road		9	1.10	1.60	0.23	3.64		
							47.51	1768.08	**83995.29**
	Basic rate	**1668.00**							
	Area Weightage 6%	**100.08**							
	Final Rate	**1768.08**							

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
7	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWTD SR 2016-17)								
	Road Portion	sqm							
	shantivana 1st cross		13	1.80	1.50	--	35.10		
	CQAL layout 7th main		20	2.80	2.00	--	112.00		
	21st cross B block		10	1.35	0.90	--	12.15		
	11th main road B block		12	0.95	1.30	--	14.82		
	10th main B block		13	0.80	1.60	--	16.64		
	8th main 16th D cross road		9	1.10	1.60	--	15.84		
							206.55	27.56	**5692.52**
	Basic rate	**26.00**							
	Area Weightage 6%	**1.56**							
	Final Rate	**27.56**							
8	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWTD SR 2016-17)								
	Road Portion	Sqm							
	shantivana 1st cross		1	321.00	6.00	--	1926.00		
	CQAL layout 7th main		1	400.00	6.60	--	2640.00		
	21st cross B block		1	180.00	7.00	--	1260.00		
	11th main road B block		1	120.00	7.30	--	876.00		
	10th main B block		1	115.00	7.50	--	862.50		
	8th main 16th D cross road		1	95.00	7.50	--	712.50		
	Approaches and bellmouths		6	3.50	7.50	--	157.50		
							8277.00		
	Deduct prime coat						-206.55		
							8070.45	3.18	**25664.03**
	Basic rate	**3.00**							
	Area Weightage 6%	**0.18**							
	Final Rate	**3.18**							
9	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17)								
		Sqm							
	For Laying DBM	Sqm							
	shantivana 1st cross		1	118.00	1.80	--	212.40		
	CQAL layout 7th main		1	150.00	2.20	--	330.00		
	21st cross B block		1	90.00	1.45	--	130.50		
	11th main road B block		1	55.00	1.60	--	88.00		
	10th main B block		1	115.00	7.50	--	862.50		
	8th main 16th D cross road		1	48.00	1.50	--	72.00		
	For Laying BC	Sqm							
	shantivana 1st cross		1	321.00	6.00	--	1926.00		
	CQAL layout 7th main		1	400.00	6.60	--	2640.00		
	21st cross B block		1	180.00	7.00	--	1260.00		

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	11th main road B block		1	120.00	7.30	--	876.00		
	10th main B block		1	115.00	7.50	--	862.50		
	8th main 16th D cross road		1	95.00	7.50	--	712.50		
	Approaches and bellmouths		6	3.5	7.50	--	157.50		
							10129.90	**11.66**	**118114.63**
	Basic rate	**11.00**							
	Area Weightage 6%	**0.66**							
	Final Rate	**11.66**							
10	KSRRB M500-16. Providing and laying dense bituminous macadam 50-75mm compacted thickness with 4.5% VG-30 Bitumen using 40/60 TPH capacity H.M.P, using crushed aggregates of grading II, premixed with VG 30 grade bituminous binder and transporting the hot mix to work site, laying with mechanical paver to the required grade level and alignment rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10, complete in all respects complete as per specification MORTH specification No. 507 (P.No.163 I.No. 21.17.6 of PW,P&IWTD S.R 2016-17)								
	Road Portion	Cum							
	shantivana 1st cross		1	118.00	1.80	0.05	10.62		
	CQAL layout 7th main		1	150.00	2.20	0.05	16.50		
	21st cross B block		1	90.00	1.45	0.05	6.53		
	11th main road B block		1	55.00	1.60	0.05	4.40		
	10th main B block		1	115.00	7.50	0.05	43.13		
	8th main 16th D cross road		1	48.00	1.50	0.05	3.60		
							84.77	**6284.74**	**532757.41**
	Basic rate	**5929.00**							
	Area Weightage 6%	**355.74**							
	Final Rate	**6284.74**							
11	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH								
	For Laying BC	Cum							
	shantivana 1st cross		1	321.00	6.00	0.040	77.04		
	CQAL layout 7th main		1	400.00	6.60	0.040	105.60		
	21st cross B block		1	180.00	7.00	0.040	50.40		
	11th main road B block		1	120.00	7.30	0.040	35.04		
	10th main B block		1	115.00	7.50	0.040	34.50		
	8th main 16th D cross road		1	95.00	7.50	0.040	28.50		
	Approaches and bellmouths		6	3.50	7.50	0.040	6.30		
							337.38	7083.98	**2389993.17**
	Basic rate	**6683.00**							
	Area Weightage 6%	**400.98**							
	Final Rate	**7083.98**							
12	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17)								
	Centreline		0.5	1231.00	0.15	--	92.33		
	Edge line		2	1231.00	0.15	--	369.30		
							461.63	542.72	**250533.12**
	Basic rate	**512.00**							
	Area Weightage 6%	**30.72**							

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	Final Rate	**542.72**							
									4409946-0
								Total Construction Cost	**4406243.854**
13	Add cost of **Waste Plastic** @ 8% of Bitumen weight						3805.65		102752.0
	Bitumen = 141 kg/cum		--	--	--	--	**3758.27**	27.00	**101473.00**
	Waste = 299.23X 141 X 8 / 100 = 3375.29 3805.65								4410100-0
14	337.38							**Cost towards PMC / Third Party inspection LS**	**44063.00**
15								**Tender premium10%** 440100	**440624.39**
								Sub Total	**4992404.24**
16								**Miscellaneous and rounding off** 4997864	**7595.76**
								Total 2154	**5000000.00**

Certificate.

1 The workspot was inspected and work is found to be necessary.
2 The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
4 The provisions made in the estimate are necessary and essential..

Rs 50,00,000=0

Assistant Engineer W.08

Assistant Executive Engineer
Assistant Executive Engineer.
Kodigehalli Sub Division.
Yelahanka Zone. B.B.M.P.
Bangalore.

Executive Engineer

ADMINISTRATIVE APPROVAL
Accorded For Rs. Fifty lakhs only
Head of A/c. P-3155
Div. Ref. No. 115/17-18 Date 19/12/17
AE 19/12
EE(BTP) 19/12

Technical Sanction
Accorded For 50.00 Lakhs
Head of A/C. P3111
CER NO : 483 Dt: 27-12-
[TA] CE (YNK)